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BLUE SHALE MINE (RFC file) 6-16-47 PIMA COUNTY  
PUERTO BLANCO MTS

OWNER: PAUL GATLIN  
LESSEE: HENRIETTA MILLER AND WALTER N. SIM

COPPER

A.L. Flagg - Book W - IRON WOOD GROUP

2010 - COULD BE IN AREA OF MILTON OR  
BAKER MINES SHOWN ON LUKEVILLE, AND WEST OF  
LUKEVILLE T.S. QUADS, APPROX T17S R6W - N3N

RECONSTRUCTION FINANCE CORPORATION  
MINING DIVISION  
REPORT OF SUPERVISING ENGINEER  
\*\*\*\*\*

Docket No: 8785  
Date Authorization for Examination: June 5, 1947  
Date of Examination: June 9, 1947  
Date of Report: June 16, 1947

1. NAME AND ADDRESS OF APPLICANT:

Walter N. Sim  
428 East 8th Street  
Tucson, Arizona

Correspondent: Same

2. CHARACTER OF PROJECT:

To open cut copper ore body, build loading ramp, loading trap at mine, and recondition road.

3. LOCATION OF MINE:

The mine is located in the Organ Pipe Cactus National Monument, approximately 10 miles northwest of the border settlement on the road between Ajo, Arizona, and Rocky Point, Mexico. None of this area has ever been surveyed. As nearly as can be estimated, the property is in low lying hills of the Puerto Blanco Mountains. The nearest railroad station is Ajo, Arizona, approximately 48 miles distant. All but nine miles is paved road. The nine miles of dirt road needs repairing, but is accessible by automobile.

4. APPLICANT:

The applicant is an individual who has been interested in other loan projects. He received a loan of \$5000.00, Docket No. C-ND-7897, on November 13, 1942. After a short period of operation he returned \$1296.00. In liquidations there has been applied \$103.00 out of a total \$330.00 estimated.

The applicant became interested with Henrietta E. Miller (Docket No. C-ND-7818) after funds were exhausted in her account. He did little, if any, work upon the property.

Later both Miller and Sim obtained a loan of \$3500.00, Docket No. ND-8390, to do some work on a zinc property. They failed to accomplish anything. The property was later taken over by other men and equipment bought for \$500.00, reducing the loan that amount.

Applicant appears sincere and hard working, but doesn't seem to have accomplished much in the past. However, on this job it would appear that applicant could handle it.

5. LOAN REQUESTED:

\$4970.00.

*Blue Shale No 1*



6. DESCRIPTION OF PROJECT:

A. General Features:

1. There are no other appurtenances which are not confined within applicant's ownership.
2. The proposed project would comply with State compensation and safety-first statutes.
3. No apparent legal discrepancies.
4. No impeded right-of-way facilities.
5. No likelihood of surface or sub-surface trespass.

B. Existing Development:

1. Shaft and open cuts:

- a. A compass and tape survey was made of the surface cuts.
- b. Samples were taken where applicant had taken some previously.

Sample No. 1, chipped across 15 feet and in same place of applicant's No. 4, assayed 1.2 ounces silver and 4.9 percent copper. Applicant's sample No. 4 assayed 0.4 ounces silver and 4.23 percent copper. These two samples check within reasonable limits.

Sample No. 2, cut 25 feet down shaft by hanging on to ladder, across 6 feet assayed 0.60 ounces silver and 4.8 percent copper. Applicant's sample No. 1 A from same place assayed 4.55 percent copper.

The vein or ore zone is exposed the full 25 feet down the shaft, but it was impossible to reach any other part of the shaft except the place sampled.

Sample No. 3 is a grab from approximately 100 tons on the dump from the shaft. It assayed 1.4 ounces silver and 7.9 percent copper. Applicant's sample No. 1 from same place assayed .80 ounces silver and 5.85 percent copper.

Sample No. 4 was cut across 15 feet of ore exposed in west end of open cut. It assayed .40 ounces silver and 5.7 percent copper.

Sample No. 5 was cut across 6 feet of ore exposed in east end of open cut. It assayed 26.2 ounces silver and 8.5 percent copper.

Applicant's No. 4-D sample was cut from both ends and along the foot wall, and assayed 5.3 percent copper over the 40 feet.

Applicant shows some additional samples which are along the walls and not across the ore. He also shows one sample of a waste dump that assays 3.12 percent copper.



c. Condition and accessibility of mine openings:

All mine openings are accessible.

d. General features of deposit:

The ore deposit lies at the base of and near the northwest end of the Puerto Blanco Mountains. The State geological map shows this range as Tertiary Volcanics, but from a cursory examination around the ore zone the base of this range is old granitic rocks with zones of quartzite and calcareous schists. Being near the base of the range, this area is mostly covered with a thin mantle of debris which obscures the underlying rocks. However, the ore zone apparently is limited to a calcareous member in the schist belt that strikes nearly east-west and dips to the north. The zone is 1500 feet or more long, but the particular area under consideration is only 200 feet long. There are two open cuts on this zone which show 15 feet thick, but the foot wall is concealed. It is likely the ore zone is thicker than 15 feet. A shaft goes down 40 feet, but 25 feet down the ore zone dips out of the shaft to the north.

The copper minerals are malachite and chrysocolla in a mass of stringers throughout the zone. There were no sulfides that could be observed. Iron oxides were very scarce. Some garnet is associated with the mineralization on the hanging wall of the zone.

C. Proposed Development:

1. Recommended plan of development:

It is proposed to develop the ore body by bulldozing or scraping the thin mantle away and exposing the full thickness of the ore zone. When the 200 feet is exposed the ore will be blasted and dragged by scraper to ore hopper, and will be mined in this fashion down the dip of the ore zone.

2. Expected capacity of operations:

- a. Mining - 50 tons per 24-hour day.
- b. Drift development - none
- c. Cross-cut development - none
- d. Raise development - none
- e. Local wage scale - 1 Dragline scraper operator, \$10.00 per day; 1 miner, \$10.00 per day; one mechanic, \$10.00 per day.

D. Equipment:

- 1. No equipment on property. Applicant claims he has a Sauerman hoist and scraper except for the pulleys.



2. Applicant expects to rent a compressor. Supplies to be purchased include powder, steel, hoses, water and air pressure tanks and pulley for slusher which applicant owns.
3. Applicant's other expenditures include building a loading trap at property, a loading ramp at railroad, and reconditioning of road from highway to property.

E. Cost Estimations:

- a. Mining - Applicant estimates \$1.00 per ton. Probably applicant can mine the ore for \$1.50 per ton. A good operator could do it for less.
- b. Hauling - Applicant claims he has a contractor with two twenty-ton trucks who will haul the estimated 5000 tons for \$2.75 per ton. Probably \$4.00 per ton will be more nearly correct.
- c. Freight to Hayden, Arizona - \$2.50 per ton.
- d. Smelter treatment -  $\$4.50 \div .34 = \$4.84$
- e. Royalty 10% of net smelter or mill returns - \$.69
- f. Total cost per ton - \$13.73.

F. Ore Reserves:

Applicant has an exposure of ore 200 feet long by 15 feet thick by 25 feet deep. Using 15 cubic feet per ton, there is estimated 5000 tons of ore that can be mined with little effort.

One 15-foot sample assayed 4.9% copper, and another one 5.7% copper. These two will average 5.3% copper. Applicant cut one over 40 feet long along the cut and across both ends that assayed 5.3% copper.

Grab samples of dump ore and cut samples over 6-foot widths gave a higher copper content. However, it is believed that an average of 5.3% copper can be mined. Thus, at the A. S. & R. Smelter at Hayden, Arizona the ore will have the following estimated value:

Silver - 1.0 ave. assay less .5 ounce x .885 cents =	\$ 0.44
Copper - 5.3% - .4% = 4.9% or 98 lbs.	
98 lbs. x 95% = 93.1 lbs. x .19336 cents =	18.00
Total gross value	\$18.44

Smelter treatment $\$4.50 \div 10\%$ of \$3.44 =	\$4.84	
Hauling	4.00	
Freight	2.50	
Transportation tax	.20	11.54
Net value		6.90
10% royalty		.69
Net value before mining cost		6.21
Mining cost		1.50
Profit per ton		\$ 4.71

7. EMPLOYMENT:

- A. No men are employed on property.



B. Applicant expects to employ three men: a slusher-scraper operator, a miner, and a mechanic.

C. One shift contemplated.

8. OBJECTION TO PROJECT:

A. Local or Regional:

Only objection might be the policy of the Organ Pipe Cactus National Monument in regards to mining and disturbance of cacti in the monument. Applicant states that area is open to mining.

9. TIME SCHEDULE:

A. It would appear that project could be completed within two months or less from time of starting.

B. The length of operating season is twelve months.

C. The loan could be easily repaid in less than one year.

10. ESTIMATED COST OF PROJECT:

A. Total development:

Removal of 400 cubic yards of overburden	\$ 400.00
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B. Purchase of Equipment, supplies:

Compressor rental	\$ 240.00	
Drilling machines	225.00	
Steel, bits, hoses, pressure tank	255.00	
Slusher cables & pulley drag	<u>400.00</u>	1120.00

C. Construction:

Camp	\$ 250.00	
Loading trap at mine	350.00	
Unloading ramp at railroad	400.00	
Rehabilitation of road	<u>400.00</u>	1400.00

D. General Expense:

Insurance deposit	\$ 200.00	
Labor, two months	<u>1850.00</u>	<u>2050.00</u>

Total	\$4970.00
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11. NATURE AND SOURCE OF REVENUE:

Proceeds from sale of copper ore.

12. COMMENTS OF SUPERVISING ENGINEER:

Applicant has an assignment of 90% interest in a lease and option to purchase agreement between Paul Gatlin, owner of two unpatented mining claims, The Blue Shale No. 1 and Blue Shale No. 2, and Henrietta Miller, the lessee. Applicant has not spent any of his own money on the property, and there has not been any money spent on the property in a great number of years.



Walter N. Sim  
Docket No. 8785

Report of Sup. Engr.  
June 16, 1947

According to the application, these claims were recorded by Paul Gatlin in April, 1947. It is not known who the previous owners were, or who did the original development.

Examination of the property reveals that undoubtedly there is an ore body 200 feet long by 15 feet thick by 25 feet deep lying on the surface that is reasonably expected to yield 5000 tons of copper ore assaying 5.3% copper. Hence, there is an estimated profit of between \$15,000 and \$20,000 from this project, and with the right handling a successful operation can result. The applicant lacks initiative and is inclined to give up an undertaking when the outlook is the least bit discouraging.

Nevertheless, this project warrants consideration, and it is recommended that a loan to the applicant be considered. It is believed that the project should be handled by sub-requisition rather than by the withdrawal method. A closer check on the spending of the funds is desired with this application.

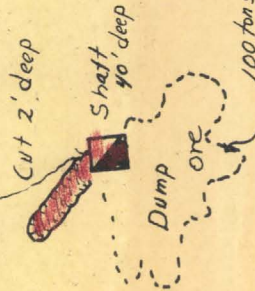
CHARLES A. RASOR  
Supervising Engineer

CAR:gnk

Attachments:  
Assay Certificate  
Map



Down 25'  
 App No 1-A 6' 4.55% CU  
 RFC No 2 6' 4.8% CU

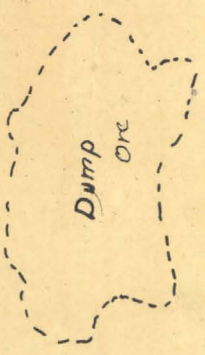


100 tons  
 App No 1 Grub 5.85% CU  
 RFC No 3 " 7.9% CU  
 RFC No 4-15' 5.7% CU

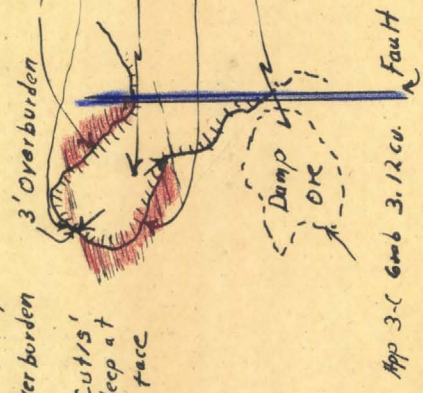
Cut 15' deep along this edge  
 No 5 26.2 8.5  
 Ag CU



Shaft 10' deep  
 9' overburden  
 Cut 15' deep at face



No	Width	CU
App No 3 Wall	3.76	
App No 4 15'	4.23	
RFC No 1 15'	4.9%	
App. No 2 30'	5.4	
App No 3-C Deep	3.12	



# BLUE SHALE No 1

Walter N Sim Docket No 8785

Scale 1"=30' June 9 1947

Charles A. Rosser